

Contact!

Internet 2 opens new world of discovery at Frankfort High

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Second Street School sixth-grader Lorli Smith has her life planned out until she turns 70. She wants to study marine biology in college, graduate, work at Sea World with killer whales and then move to Alaska at age 30 to continue her study of marine life.

She moved one step closer to her dream Wednesday when Frankfort High School became the first Kentucky high school to connect with Mote Marine Laboratory in Sarasota, Fla., via Internet 2.

Lorli learned about sharks, sea turtles, manatees and coral reef in a presentation about the district's new technology to legislators, Kentucky Department of Education officials, Education Cabinet Secretary Virginia Fox, ConnectKentucky members, district students, staff and administration and other education officials from across Kentucky.

The new broadband system,

Internet 2, makes live videoconferencing possible with anyone, said Paul Christy, Frankfort High School principal. Students can now communicate classroom to classroom in the building and with classrooms all over the United States and all over the world.

The high school was chosen to debut the technology because of its proximity to the Capitol, its size and because it has the network to support Internet 2.

"We're just lucky," Christy said. "Somebody at the Frankfort Plant Board had the foresight to install the fiber optics that made it possible for us to access this technology ... We knew (Internet 2) was out there, and we knew it was possible, but to see it in the building is phenomenal."

The Plant Board voted to equip Frankfort Independent and Franklin County Public schools with fiber optic lines around 1995, said John Higginbotham, telecommunications

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Keith Exley, left, and **Jason Collins**, right, watched as **Tim Sizemore**, all with the Kentucky Education Department, checked a computer Wednesday for the demonstration and technology roundtable discussion at Frankfort High School. The school is the first in Ken-

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superintendent. The lines tie all of the district schools together, to the board office, then all to the Commonwealth Office of Technology, which is the "on ramp" to the Internet.

Having a fiber optic line rather than coaxial cable eliminates most capacity concerns, Higginbotham said. Schools can use the optic lines to share or download data, to access video or use the Internet without exceeding capacity.

"This all comes back to a municipal utility working with the community it serves to bring it products and services years before they are available, not only to the rest of Kentucky, but to the rest of the United States," Higginbotham said. "It is a collaborative effort because we live here and work here, too. We want to see our community succeed."

Gov. Ernie Fletcher would like to see all of Kentucky able to access high-speed Internet, particularly schools in underserved areas. He released his Prescription for Innovation report Wednesday about the progress of ConnectKentucky, a public-private partnership that is working on improving technology across Kentucky and bringing broadband Internet to every household by the end of 2007.

ConnectKentucky is advocating legislators create a grant and loan pool that would fund bringing broadband Internet to underserved areas in Kentucky.

Fletcher also included in his budget proposal \$59 million for the Kentucky Education Network, which will allow all elementaries through colleges to be on a single network and allow them to interact through that network.

The money would also help pay for online testing assessment, which would allow schools to get their Commonwealth Accountability Testing System scores back sooner to analyze and work from.

With Internet 2, the school can access up to four locations at once, Christy said. The students tested it Tuesday to make sure they knew how it worked. Then, at the demonstration, visitors trav-

eled to Sarasota to learn about marine biology and met with Julia Heighway, director for the Center for Interactive Learning and Collaboration in Indianapolis.

"It is no different connecting class to class in the building than connecting class to class around the world," Christy said. "And it is quicker than a cell phone call."

"It closes the world, because when our students are working on senior projects and want to study, say, African masks, they now will be able to connect to someone in Africa who makes these masks, watch a live demonstration and then converse with that person," Christy said. "In simple terms, this is pretty neat stuff."

The three areas Christy said the new technology will impact most are economics, teachers and students.

In terms of economics, he said distance learning saves money.

"Every single school needs to look at both sides of every dollar bill that goes through to make sure we are getting everything we possibly can out of it," Christy said. "This will not cause us to pay extra."

Plus, it is a smarter way to do distance learning, said Danielle Thomas, a senior who took a virtual class last semester.

"It was difficult because I couldn't communicate with the teacher," Thomas said. "This will enable us to have the capability to sit in the room here, see the teacher, talk to her and participate in class discussions, all virtually. It will make (virtual classes) a lot easier."

She said she is sad she will not be able to use the new technology for her senior project.

Senior projects are based on the students' junior research paper. The students must find a community mentor and put their research paper idea or topic into action.

"It would have been cool for me, because I did mine about a lady photographer and she has shown her work all over Europe," Thomas said. "If I had this, I could have connected with some of the people who saw or showed her

work."

Also, many times students have a hard time finding mentors because they need to meet with their mentors each week to discuss the progress of their projects, Thomas said. Students need to find someone close enough to drive to meet since they only have a 90-minute block during the day to travel to and meet with their mentors.

Now, Internet 2 will allow students to have a mentor in Europe, even, because they can log on and converse in real time with anyone around the world that has video-conferencing technology, Thomas said.

"This will give them a lot more information that they will be able to get from the printed text or Internet," said Gayle Gray, Frankfort High School librarian. "Now they can communicate on the other end with an expert in the field. It is beneficial because they will have the opportunity to ask questions, which will force them to use higher level thinking skills."

Frankfort High School junior Wade King said Internet 2 will also reinforce what the students learn in class and take it to the next level.

"I think this technology will help best with foreign language classes," King said. "We can talk with classes in Latin America or Spain and actually get to hear their native accents. A lot of times we have a hard time understanding the accents, so this will help us learn the language faster."

Sophomore Ashley Smith said she is excited about the possibility of Frankfort High School being a technology model for other public schools. She said she never pictured Frankfort being the leader in technology.

"It is really exciting to be a part of that," Smith said. "I think this will help us a lot in the future. Now we can go all around the world to collect information. It is right at our fingertips and a lot faster and easier than searching the Internet."

However, she said it might also raise teachers' expectations and

make school a little harder because the teachers know students have access to the latest technological tools.

Patrick Tidwell, a Second Street sixth-grader, said he thinks the new system will make school easier. His class is designing a rollercoaster this semester and also working on how-to projects, in which they teach other people how to complete a task, and the Internet 2 access will aid them in those assignments, he said.

The technology also will be a boon for professional development, Christy said.

"Our staff can attend national conferences without leaving Frankfort," Christy said. "They can sit in on a seminar, ask questions, see them and have them see

us. They can do everything but shake hands."

ConnectKentucky loaned Frankfort High School some equipment for the presentation and since Frankfort is the pilot, it will be eligible for grants and equipment aid, Christy said.

However, most of the schools have the equipment available, but the state is trying to lay "the pipes," the technology infrastructure to allow all schools, from elementary through college, to share information, Fox said.

Before the demonstration Wednesday, Fletcher proclaimed it Tech Day and awarded business, individual and student technology awards. He also reported on the progress of improving Kentucky's technological offerings.

Kentucky has led the nation in the growth rate of new subscribers to high-speed Internet in the last two years, Fletcher said. More than 240,000 Kentucky homes have gained access to broadband service in the last two years and about 77 percent of Kentuckians can tap into high-speed service. The goal is to have all Kentuckians access high-speed Internet by the end of 2007.

Fletcher estimated full broadband development would add 14,000 jobs statewide and \$5 billion to overall economic activity. The report said that in 2003, Kentucky's high-tech workers, on average, earned \$17,000 more than the average work wage in Kentucky's private sector.